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A format to be used by each of the institutions in the University of Wisconsin and Wisconsin State University systems to summarize information which justifies requests for new facilities. Its completion requires information concerning--(1) present and projected student enrollments by level, and (2) amounts of space by "category" (i.e., classroom and service, instructional laboratory and service, etc.) for line items relating to space occupied, available, required and recommended. The system of space classification is comprised of two categories, one based upon function and the other on type of room. A discussion of the system and definitions of its space categories are included. Completion of this worksheet requires a knowledge of the institutions, current and approved space situation, projections of enrollments and faculty and staff populations based upon both expected enrollments and operating budget as well as the academic program. (FS)

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PROPOSED 1969-71 BIENNIAL BUILDING PROGRAM FORMAT

The biennial building program format is used by each of the institutions in the University of Wisconsin and Wisconsin State University systems to summarize information which justifies requests for new facilities. This summarization, along with supporting back-up materials, will be transmitted to the various agencies responsible for compiling, evaluating and approving the building priority list for the 1969-71 biennium (e.g., campus and central administrations, boards of regents, the Coordinating Council for Higher Education, the Building Commission, etc.). A sample of a proposed 1969-71 building program format developed jointly by the CCHE, the University of Wisconsin and the Wisconsin State Universities appears in Chart One. Like previous formats of this nature it contains the following information for each campus: the present and projected student enrollments by level, an amounts of space by "category" (i.e., classroom and service, instructional laboratory and service, etc.) for line items relating to space occupied, available, required and recommended. The categorical breakdown of space occupied in the current biennium is obtained from the institution's physical facilities inventory. This information must be modified by subtracting areas which are leased or rented in order to arrive at space available by category as of the fall of 1967. Adding space which is approved or under construction as a result of previous biennial building requests, and subtracting areas in buildings which are temporary or to be razed results in figures reflecting the space which would be available to the institution in the forthcoming biennium if no additional facilities were approved. The space required for each category is arrived at either by application of CCHE approved space guidelines or, where these do not exist, on the basis of experience and academic planning. By subtracting the space required from the space available, a deficit or surplus reflecting space need can be computed for each space category. This information is used in establishing building requests for the 1969-71 biennium which will best meet the space needs of the institution. However, it should be understood that buildings should not be planned to exactly cancel out the generated deficits and surpluses, but rather, such planning must take into account the academic goals and policies of the particular institution.

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At present CCHE approved space guidelines exist for only five of the eleven categories appearing on the building program format. These guidelines for classroom and service; instructional laboratory and service; office, conference and service; library; and physical education are shown in Chart Two. It should be noted that these guidelines require the following types of data projections for the fall of 1972: student class hours; student lab hours; research, library and total faculty and staff populations; undergraduate, graduate and total enrollments; and number of library volumes. Even some of

these guidelines were approved for only the 1969-71 biennium while none were approved for the other six categories of space. This was the result of both the implementation of a new space calssification system and the realization that a more sophisticated approach is needed in arriving at institutional space requirements. For example, the student class hour approach adopted for projecting classroom and service space requirements. Further information pertaining to the approved guidelines can be found in the following CCHE Working Papers: #11 of 1968, #79 of 1967, #17 of 1966, #34 of 1966, and #53 of 1966.

The implementation of a new space classification was necessary in order for the institutions to comply with both federal and CCHE requests for space data. This system is comprised of two kinds of classifications, one based upon function and the other on type of room. Chart Three shows a listing of these two classifications.

It should be understood that there are over 80 specific classifications used for identifying room type. This system is currently used by the two university systems, the public vocational-technical institutions, and will soon be incorporated in a facilities inventory of the private institutions of higher education in the state. If further information concerning this space classification system is desired, it is recommended that reference be made to the "Higher Education Facilities Classification and Inventory Procedures Manual," Superintendent of Documents Catalog No. FS 5.251: 51016, which is available from the U.S. Government Printing Office for $1.50. The University of Wisconsin system also employes a room sub-type classification which identifies some 200 additional types of space. This creates the potential for a more detailed analysis of an institution's current space situation, which should prove useful in institutional planning and in further space guideline development.

This new system of space classification has resulted in changes from the space categories which appeared on building program formats in previous biennia. Even though it would have been desirable to establish these new categories on the basis of either function or room type, it was necessary to incorporate a mixture of the two because of guidelines which were approved prior to the implementation of the new classification system--in particular library and physical education. For comparison purposes the space categories appearing on both the 1967-69 and 1969-71 building program formats are shown in Chart Four. It is hoped that the following explanation will help to clarify the relationships between the old and new categories. *Classroom* space is now shown under classroom and service. *Instructional laboratory* space is included in that shown for insturctional laboratory and service. *Office* makes up a portion of the area indicated for office, conference and service. The *library* category remains unchanged, and all space which is functionally classified as library appears under this heading. *Other instructional* space is split, since it was comprised of various types of instructional service areas, and now portions appear under classroom and service; instructional laboratory and service; office, conference and service; other study

and service; and other special-use facilities and service. The *research* category remains unchanged, and all space functionally classified as research appears under this heading. The category of *physical education* also remains unchanged and includes all athletic facilities space used for instruction. *Extension and public service* was primarily a functional category, and its space is now included under the new categories of office, conference and service; other study and service; other special-use facilities and service; general-use facilities and service; and supporting facilities and service. *Physical plant* was also a functionally oriented category, and this space is now found primarily under office, conference and service; and supporting facilities and service. *Other non-instructional* space is similarly split between office, service and conference; and supporting facilities and service. *Auditorium* space now appears under general use facilities. *Auxiliary enterprise* was also a functional category, as its space appears under the new category headings of office, conference and service; intercollegiate athletics and service; and general-use facilities and service. Thus, it can be seen that space for the categories relating to classroom and instructional laboratory will increase due to the addition of service areas. Space for the office, conference and service category will show a more marked increase because not only is service space included, but also all office-type space which was previously buried under other headings.

Now that the new space classification system and the conversion from previous space categories is more fully understood, it is possible to define the space categories appearing on the 1969-71 building program format. These definitions are shown below, and are intended to impart a general idea of the kinds of space appearing under each heading.

Classroom and Service--instructional space used for class meetings such as lectures, recitations or seminars, and space which directly supports such facilities (e.g., preparation rooms, coat rooms, projection booths, etc.).

Instructional Laboratory and Service--space equipped for specialized instruction in a specific area (e.g., chemistry experiments, painting, music practice, etc.), and space which directly supports such facilities (e.g., preparation rooms, balance rooms, darkrooms, etc.).

Research--all space used for research purposes; including laboratories, research office, conference rooms, cold rooms, and greenhouses.

Office, Conference and Service--rooms used by faculty, staff or students working at a desk; space which directly supports an office (e.g., file rooms, duplicating rooms, waiting rooms, office supply storage areas, etc.); conference rooms used by groups for non-class meetings; and space which directly supports a conference room (e.g., kitchenettes, chair storage, projection booths, coat rooms, etc.)--unless such areas are functionally classified as research or library.

Library - Areas used for the orderly collection, storage and retrieval of knowledge (e.g., study rooms, carrels, stacks, library processing areas and library offices), which are under the supervision of the library operation and available for use by more than one department.

Other Study and Service - reading rooms, study rooms, and supporting spaces typically scattered across the campus, which are not under the control of a librarian.

Physical Education and Service--athletic facilities (e.g., gyms, pools, towel rooms, etc.) used for instructional, intramural and recreational activities.

Intercollegiate Athletics and Service--athletic facilities used for intercollegiate sports; including spectator seating area.

Other Special Use Facilities and Service--areas related to instruction, but somewhat specialized in nature. This includes space devoted to armory activities (e.g., indoor drill areas, rifle ranges, uniform distribution and storage areas, etc.); audio-visual, radio and TV facilities used in the production and distribution of instructional media; non-medical clinic facilities usually associated with such educational areas as speech and hearing, remedial reading and remedial writing; demonstration facilities such as home management houses and pre-school nurseries; and field service facilities (e.g., barns, sheds, animal shelters, etc.) related to farm operations.

General Use Facilities and Service--space which is usually considered to be revenue producing in nature. This category includes auditoriums and theaters; exhibition and display areas; dining and food preparation areas other than those used for residence halls; student health facilities; lounges; merchandising areas such as newsstands or vending machine rooms; and recreational areas typically found in student unions (e.g., bowling alleys, ping pong rooms, ballrooms, chessrooms, etc.).

Supporting Facilities and Service--areas which in general provide services on a campus-wide basis. The following types of space are included under this heading: data processing-computer facilities; painting, electrical, carpenter shops and similar physical plant maintenance facilities; central printing and duplicating shops; central stores; "warehouse" storage; vehicle storage; central laundry; and central food stores.

As previously indicated the information necessary for the completion of this worksheet includes not only a knowledge of the institution's current and approved space situation, but also projections of enrollments and faculty and staff populations, based upon both expected enrollments and operating budget. In addition the academic program must be taken into account. Thus, all four of the areas of concern at this conference--academic planning, institutional studies, finance and facilities--will be involved in producing information necessary for the completion of the 1969-71 building program format. However, greater effort is required if this information is to be properly integrated. In future biennia the presently elusive academic program of the institution should form the umbrella under which all the planning and projecting tasks necessary for the determination of space needs and recommended buildings is carried out. Operating budget expectations should be more fully considered in faculty and staff population projections, as well as in the projection of other information such as the number of library volumes. And, of course much work remains to be done in the development and refinement of space guidelines. Thus, although the 1969-71 building program format represents a step forward, it is only a transitional step toward a format which truly reflects and easily communicates each institution's particular space needs.

Enrollments: 1967 1972

CHART ONE

Undergraduate
Graduate
Total

PROPOSED 1969-71 BIENNIAL BUILDING PROGRAM FORMAT

	Class-room & Serv	Instr Lab & Serv	Re-search	Office Conf & Serv	Libry	Other Study &Serv	Phy Ed & Serv	Inter-col Athl& Serv	Other Spec Use & Serv	General Use Fac & Serv	Support Fac & Serv	Total Assign Space
Space Occupied Fall 1967												
Space Leased or Rented												
Space Authorized or Under Construction 1965-67												
Space Authorized or Under Construction 1967-69												
Space Released (Razed or Temp.)												
Space Available Fall 1970												
Space Required Fall 1972												
Deficit or Surplus												
Recommendations 1969-71												

CHART TWO

1969-71 APPROVED SPACE GUIDELINES

Classroom and Service:

$$\frac{16.5 \text{ NASF/Student Stat.}}{.67 \text{ Stat. Util. x } 30 \text{ RM. PDS./WK./RM.}} = 0.821 \text{ NASF/Student Class Hour}$$

Instructional Laboratory and Service:

$$\frac{71.5 \text{ NASF/Student Stat.}}{.80 \text{ Stat. Util. x } 24 \text{ RM. PDS./WK./RM.}} = 3.724 \text{ NASF/Student Lab Hour}$$

Office, Conference and Service:

135 NASF/FTE Faculty and Staff-Exclusive of Library and Research Faculty and Staff

Library:

Stack Space:	0.1 NASF/Volume
Reading Rooms:	25.0 NASF x .20/ Undergraduate Student
Carrel Space:	45.0 NASF x .25/ Graduate Student
Office & Serv:	135.0 NASF / FTE Library Staff

Physical Education:

47,500 NASF with Enrollments up to 5,000.

9.0 NASF/Student with Enrollments of 5,000 to 10,000.

8.5 NASF/Student with Enrollments of 10,000 to 20,000.

8.0 NASF/Student with Enrollments of 20,000 and over.

CHART THREE

SPACE CLASSIFICATION SYSTEM

Function Classification	Generalized Type of Room Classification
Instruction	Classroom Facilities
Research	Laboratory Facilities
Public Service	Office Facilities
Library	Study Facilities
General Administration And Institutional Services	Special-Use Facilities
Auxiliary Services	General-Use Facilities
Non-Institutional Agencies	Supporting Facilities
Unassigned Area	Medical Care Facilities
Non-Assignable Area	Residential Facilities
	Unassigned Area
	Non-Assignable Area

CHART FOUR

SPACE CATEGORIES

1967-69 AND 1969-71 BIENNIAL BUILDING PROGRAM FORMATS

1967-69	1969-71
Classroom	Classroom and Service
Instr. Laboratory	Instructional Laboratory and Service
Office	Research
Library	Office, Conference and Service
Other Instructional	Library
Research	Other Study and Service
Physical Education	Physical Education and Service
Extension & Pub. Serv.	Intercol. Athletics and Service
Physical Plant	Other Special-Use Facilities and Service
Other Non-Instructional	General-Use Facilities and Service
Auditorium	Supporting Facilities and Service
Auxiliary Enterprise	